

Claims

1. A polymeric coextruded multilayer web, the web comprising:
at least two layers that are discontinuous in the cross-web direction, each layer
comprising a plurality of distinct phases that are substantially continuous in the down-web
5 direction; and

at least one layer that is substantially continuous in both the cross-web and down-
web directions;

wherein said web has an x-axis that is in the cross-web direction of the web, a y-
axis that is in the down-web direction of the web and a z-axis that is in the thickness
10 direction of the web, and wherein the substantially continuous layer(s) lacks weld lines in
the y-z plane of the web.

2. The web of claim 1 wherein said substantially continuous layers independently
comprise a material selected from the group consisting of pressure-sensitive adhesives,
thermoplastic materials, elastomeric materials, melt processable foams, high viscosity
15 liquids, and mixtures thereof.

3. The web of claim 1 wherein said discontinuous layers independently comprise a
material selected from the group consisting of pressure-sensitive adhesives, thermoplastic
materials, elastomeric materials, melt processable foams, high viscosity liquids, and
mixtures thereof.

4. The web of claim 1 wherein said continuous layers comprise an acrylic pressure-
sensitive adhesive and wherein said discontinuous layers independently comprise a
material selected from the group consisting of a non-pressure-sensitive adhesive, a
thermoplastic polyolefin, and combinations thereof.

5. The web of claim 4 wherein said thermoplastic polyolefin is an ethylene vinyl
25 acetate copolymer, an ethylene/poly- α -olefin copolymer, amino-compatible polyolefin
or a blend of ethylene/poly- α -olefin and amino-compatible polyolefin.

6. The web of claim 1 wherein said substantially continuous layers comprise a
pressure-sensitive adhesive that is foamed and wherein said discontinuous layers comprise
a material selected from the group consisting of pressure-sensitive adhesives,
30 thermoplastics and homopolymers and copolymers thereof, and combinations thereof.

7. The web of claim 1 wherein said substantially continuous layers and said discontinuous layers comprise thermoplastic homopolymers or copolymers and mixtures and blends thereof.

8. The web of claim 1 wherein said substantially continuous layers comprise at least one polyolefin and wherein said discontinuous layers comprise a material selected from the group consisting of cyclic polyolefins or blends of cyclic polyolefin with non-cyclic polyolefin, polyamides, styrenic polymers and homopolymers and copolymers thereof.

9. The web of claim 1 wherein said substantially continuous layers comprise a porous film.

10. The web of claim 9 wherein said substantially continuous layers comprise polypropylene and oil and wherein said discontinuous layers have a higher tensile strength than said continuous layers.

11. The web of claim 9 wherein said discontinuous layers comprise polypropylene.

12. The web of claim 9 wherein said discontinuous layers comprise a dye or colorant.

13. The web of claim 1 wherein said discontinuous layers alternate with said at least one continuous layer.

14. The web of claim 1 wherein said web has two substantially continuous layers between each set of discontinuous layers.